California Department of Fish and Game Feasibility Evaluation of Round 2 Draft MPA Proposals in the MLPA North Coast Study Region July 15, 2010

Background: The Department of Fish and Game (Department) has reviewed the set of marine protected area (MPA) proposals advanced by the MLPA North Coast Regional Stakeholder Group (NCRSG) for evaluation in Round 2 of the Marine Life Protection Act (MLPA) Initiative planning process for the MLPA North Coast Study Region (NCSR). Department review of these proposals has focused on feasibility aspects of individual MPAs (Part I), goals and objectives identified for individual MPAs (Part II), and on prospects of MPA proposals to meet the overall MLPA goals (Part III). This document provides the outcomes of that evaluation and recommendations for improving the feasibility of MPA proposals developed for the final round of the NCSR.

PART I. Department Guidance and Feasibility Criteria

The feasibility criteria used for this evaluation were outlined in the Department of Fish and Game (Department) document titled "Feasibility Criteria and Evaluation Components for Marine Protected Area Proposals (CDFG, March 23, 2010)." The Department first presented these criteria to the NCRSG at their March 2010 meeting when the document was distributed, and again at subsequent meetings. These criteria are consistent with Department criteria used in previous study regions to guide stakeholders and evaluate all MPA proposal drafts, and were used to evaluate Round 1 external MPA proposals in the NCSR¹. As in previous study regions, these criteria will ultimately be used by the Department to make recommendations to the California Fish and Game Commission (Commission), if requested, with respect to MPA proposals for the NCSR.

Overview of Evaluation Components

This evaluation provides detailed Department feedback on NCRSG Round 2 MPA proposals regarding how effectively the proposals meet Department feasibility criteria. After providing feedback and guidance, the Department expected the Round 2 proposals to improve, as compared to Round 1, with regard to adherence to Department feasibility guidelines. While some improvement was noted, further improvements are needed to consider a final proposal that would meet the Department's feasibility criteria and management needs. The evaluation provided for this iteration will serve to help focus the NCRSG on the elements that need refinement in order to meet the Department's feasibility guidelines in the final round. MPAs that follow the Department feasibility guidelines will help ensure that MPAs are enforceable and easy for the public to understand. A summary of the feasibility evaluation findings is included in Table 1. Detailed evaluations of individual MPAs and proposals are also

¹ Department of Fish and Game Feasibility Evaluation of Round 1 Arrays in the MLPA North Coast Study Region (March 23, 2010) (see: http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentVersionID=31973)

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provided within this document (Tables 2 & 3). In addition, Department comments and guidance regarding several key issues that emerged within several proposals are provided below and should be considered during modification of MPA proposals in Round 3. Finally, comments on the likelihood of MPAs to meet the goals of the MLPA are also provided.

Frequently noted design elements that decrease MPA feasibility include:

- Incorrect delineation of boundaries in inland waters (i.e., bays, estuaries, and sloughs)
- MPAs that provide little protection ecologically due to the allowed take or include a long list of excepted species and gear types to the general regulation
- Inappropriate proposed regulations, such as allowing the "removal of invasive species" or allowing blanket exemptions for permitting

Other elements that were largely overlooked in the Round 2 proposals, but must be included in the final iteration include:

- Explicit description of intended boundaries (e.g., "aligns with headland" or "parallels shoreline")
- Clear and complete proposed take regulations for all MPAs

Table 1. Summary of the feasibility evaluation findings for Round 2 arrays. Details of this evaluation can be found in Tables 2 and 3.

			% of	% of Proposed MPAs that Do Not Meet Guidelines		
Array	# of Proposed MPAs	# of Proposed Special Closures	MPA Design ¹	MPA Boundaries ²	Take Regulations (Unspecified Allowed Take) ³	Take Regulations (Other)⁴
Ruby 1	23	10	48%	56%	52%	39%
Ruby 2	12	3	50%	66%	50%	41%
Sapphire 1	20	5	45%	50%	55%	15%
Sapphire 2	14	3	50%	43%	64%	14%

¹ This category summarizes MPA designs that utilize categories such as intertidal MPAs, multiple zoning, and hanging corners are summarized here.

² This category summarizes MPAs with boundary concerns including not adequately utilizing easily recognizable permanent landmarks or easily determinable lines of latitude and longitude, utilizing boundaries that split popular beaches, or estuary boundaries that do not follow feasibility guidelines.

This category includes MPAs with allowed take that is not yet specified, with the intention of allowing activities that would not interfere with traditional tribal gathering and harvest. Pursuant to feasibility guidelines, allowed take should be specified by commercial and/or recreational mode, species and method of take.

⁴ This category summarizes all other comments regarding take regulations. Includes MPAs with complex and permissive regulations, MPAs that allow the take of invasive species, propose permitting exemptions, or have levels of protection below moderate-high.

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Boundary Descriptions

A clearly written description of boundaries should be included for each proposed MPA. This includes boundaries with intentional coordinates (e.g., "seaward corner placed at whole minute of latitude and longitude") and with intentional landmarks (e.g., "western boundary extends to permanent buoy; southern boundary connects to the shore at northern end of Gull Rock"). While coordinates of latitude and longitude will be assigned for all boundaries, including MPAs at specific landmarks, an accompanying written description for each MPA will help facilitate the Department's review of proposals, enhance quality control of proposal maps, and will help ensure stakeholders' intentions are captured in regulatory documents.

Use of Landmarks vs Readily Determined Lines of Latitude and Longitude
Department feasibility guidelines state that both recognizable permanent landmarks and readily determined lines of latitude and longitude can be utilized for designing MPAs. However, determining when to use one over the other can be challenging. When considering which to use, the Department recommends that stakeholders first consider the use patterns for the area under consideration for MPA placement, such as whether it is an enclosed water body (e.g., estuary), an area with heavy shore-based use, or an area primarily accessed by boat users. This will influence whether simple coordinates or landmarks will be the most beneficial to the primary users of that area.

In estuarine waters within the MLPA study region boundaries, the Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc.) to delineate boundaries, and to ease enforceability and public understanding of boundaries. In ocean areas that are heavily utilized for shore-based consumptive activities, stakeholders should consider the use of easily recognizable permanent landmarks as higher priority than using major lines of latitude and longitude.

Existing MPAs Retained

The MLPA specifically calls for improving the existing suite of MPAs in California. Part of the charge of the NCRSG is to consider the extent to which the existing marine protected areas in the NCSR meet the goals of the MLPA and specifically retain, modify or eliminate existing MPAs. While in Round 2 proposals the NCRSG chose to retain some of the existing MPAs, the retained MPAs were not modified to improve their boundaries or take regulations to meet the Department's guidelines for feasibility. If retained in the final round, existing MPAs should be redesigned to meet feasibility guidelines for simplified boundaries and simplified take regulations, where appropriate. The Department is prepared to provide comments to the Blue Ribbon Task Force (BRTF) and the Commission regarding existing MPAs that are retained within final MPA proposals, but are unlikely to contribute to the goals or requirements of the MLPA.

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Special Closures

Special closures are not MPA designations but are used to enhance marine protection of certain species. Pursuant to BRTF guidance, special closures should be used sparingly. In addition, special closures should only be proposed if other state and federal regulations are inadequate to provide protections to the marine species of focus. Proposed special closures should include information on the rationale behind the proposal, species involved, and specific information on why other existing state and federal protections (including the establishment of an MPA) are not adequate. The Department will review the recommendations and justifications for special closures after Round 3 proposals are completed, and will make recommendations to the Blue Ribbon Task Force and the Commission regarding special closures.

Removal of Invasive Species in an MPA

Some MPAs in the Round 2 arrays propose allowing the "removal of invasive species". As the Department stated in its evaluation of Round 1 draft external MPA arrays, the removal of invasive species from an MPA is not a defined regulated activity that should be applied to an individual MPA. The Department of Fish and Game has a program regarding invasive species (www.dfg.ca.gov/invasives and www.dfg.ca.gov/ospr/about/science/misp.html) and will work to address these issues as they arise through the existing program. Instead of recommending that this language be included in allowed take regulations, the NCRSG may include this as a design consideration and recommendation for restoration to the area in the future.

Existing Activities Authorized under Permit

Existing permitted activities (such as oil and gas leases, aquaculture leases, beach nourishment, dredge disposal sites, wave energy, outfall pipes, the maintenance of existing artificial structures such as docks and piers, etc.) should be taken into consideration during MPA design. Designation of a new MPA cannot interfere with existing activities under the jurisdiction of other permitting entities, and such activities may not be removed by MPA designation. The Department recommends that the NCRSG identify where these existing permitted activities or artificial structures overlap with proposed MPAs and identify them in "other proposed regulations" in Round 3 proposals. An MPA proposed to be a no-take SMR would need to be designated as an SMCA that only allows take incidental to the activity, under normal permitting requirements. Similarly, an MPA proposed as an SMCA would also specify that take incidental to the existing activities is allowed. While this allowance should apply only to known existing activities or structures, the NCRSG may identify future uses that it considers to be incompatible with the goals and objectives of a particular MPA, and recommend they be disallowed from future approval. See the informal advice memo from California's Attorney General; Establishing, Use and Enforcement of Marine Managed Areas, September 25, 2009, for guidance on this subject.

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Restoration Permits and Future Authorizations

Several MPAs propose to include blanket exemptions for restoration activities (current and future). While activities such as restoration fall under the description of existing activities above, blanket exemptions to "allow for restoration permits" or "allow all activities with a primary purpose of habitat restoration or sea level rise", as proposed in some Round 2 MPAs, are not necessary as a proposed regulation in an individual MPA. Restoration activities, in general, are identified as allowable within MPAs, including SMRs (see the Marine Managed Areas Improvement Act). However, an MPA designation cannot exempt projects, restoration or otherwise, from the regular existing permitting processes utilized by the Department of Fish and Game (such as scientific collecting permits), or other state, federal, or local permitting agencies. Any future permits or regulatory requirements of the Department and other agencies with regard to activities occurring in MPAs will still be required pursuant to the permitting requirements and authority of any entity that regulates such activities. The NCRSG may include a recommendation for future projects or activities that they recommend either be authorized or be disallowed; however, these recommendations are more appropriately placed under "other considerations".

Co-Management and MOUs in MPA Regulations

Many of the MPA proposals were advanced with recommendations from the NCRSG to develop Memoranda of Understanding (MOU) agreements. Such agreements may be between the Department and entities such as other government agencies, research institutions, or tribal governments, communities and organizations to formalize partnerships in specific MPAs. Although these MOU agreements are outside of the MLPA rulemaking process, they may be considered and pursued under the guidance of the draft Master Plan for Marine Protected Areas. For example, in the South Coast Study Region (SCSR), similar recommendations were made, and have been forwarded as recommendations to accompany the Initial Statement of Reasons for Regulatory Change in the SCSR (see SCSR Attachment 12).

Tribal Uses

A general intent was expressed in all Round 2 proposals to allow tribal uses in many proposed MPAs. For this feasibility evaluation, the Department limits its specific comments regarding take allowances to those MPAs that provide specific information such as species and gear type. While there is not currently a regulatory structure to allow for exclusive use of natural resources in marine waters of California, such an option could be explored through the legislative process. Since the Department cannot currently grant exclusive rights to take living marine resources to any individual or group of individuals, allowed take in MPAs must apply to and be available to everyone.

Consistent with previous Department guidance, categories of species and method of take will need to be included at a level specific enough to encompass the desired activities of gathering and harvest in Round 3 proposals. All

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proposed regulations must comply with the existing fisheries regulatory framework (i.e., no illegal gear or species prohibited under California Fish and Game regulations should be proposed), and should apply to all recreational users (or to all commercial users if relevant). Department staff are available to work with NCRSG members to assist in determining take regulations that are consistent with the type of known non-commercial tribal gathering or harvest they desire to accommodate in an area.

Undetermined Levels of Protection Due to Unspecified Take

There are many MPAs proposed with unspecified take intended to accommodate tribal gathering activities, resulting in an "undetermined" level of protection (LOP) as a placeholder until such time as specifics could be gathered and added. As allowed take regulations are developed, the Department reiterates its feasibility guideline for take regulations to be simple and that complex take regulations, such as with long lists of excepted species and gear types, should be avoided. In addition, as allowed take becomes specified in the final round of MPA development, an LOP will be commented on. The Department will provide specific comments to highlight MPAs that provide little protection ecologically due to extensive allowed take or lower LOPs (i.e., LOPs below the BRTF-identified guidance of moderate-high and above). If MPAs are included that are below a moderate-high LOP, only non-ecological goals should be attributed to the MPA.

Boundary Delineations and Allowed Take

For feasibility reasons, the Department does not support the use of inshore "ribbons" in MPA design due to concerns about ecological protection (see "Prospects to Meet the Goals of the MLPA", below) and enforcement. However, if the NCRSG chooses to propose nearshore MPA "ribbons" despite the Department's concern, is important to consider the placement of the offshore boundary and the allowed uses. To enhance safety, enforceability and public understanding, the Department's enforcement division advises that only shore-based activities should be proposed in MPAs where boundaries are very close to shore, and a straight line between two points (defined by coordinates of latitude and longitude) be used rather than an undulating line. If boat-based activities are desired, straight MPA boundaries should be placed at least 1,000 feet offshore to safely accommodate those uses.

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Table 2. Department of Fish and Game feasibility comments regarding MPA design and boundaries for Round 2 MPAs by area (N/A indicates the draft proposal did not propose an MPA in the area). Proposals are indicated as follows: R1: Ruby 1, R2: Ruby 2, S1: Sapphire 1, S2: Sapphire 2.

Area	Proposal- MPA / Cluster Design	Proposal- MPA Boundaries
Pyramid Point	R1- Cluster Design. Design creates a nearshore intertidal MPA. Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected and include take allowances consistent with protecting natural diversity and the life history needs of organisms contained within the MPA or MPA cluster. R2- Cluster Design. See response from MPA proposal R1 above. S1- Cluster Design. See response from MPA proposal R1 above. S2- No feasibility concerns identified in category.	R1- Northern Boundary. Boundaries meet feasibility guidelines. However, to simplify proposed boundaries enforcement would prefer the northern boundary to extend to the California / Oregon border. R2- Southern Boundary. Boundary splits a beach. Enforceability and public understanding would be improved if boundary moved to an easily recognizable permanent landmark. S1- No feasibility concerns identified in category. S2- No feasibility concerns identified in category.
Point St. George	R1- MPA Design. Boundary design creates an awkward shape due to the unusual configuration of the state water boundary. In this instance, enforceability and public understanding would be improved if boundaries were simplified by using straight lines adjacent to the 3 mile contour (to create a box or triangle). R2- N/A S1- N/A S2- N/A	R1- No feasibility concerns identified in category. R2- N/A S1- N/A S2- N/A

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Area	Proposal- MPA / Cluster Design	Proposal- MPA Boundaries
Wilson Rock /	R1- No feasibility concerns identified in category.	R1- Northern Boundary. Boundary splits a beach.
False Klamath	R2- N/A	Enforceability and public understanding would be
Cove	S1- No feasibility concerns identified in category.	improved if boundary moved to an easily recognizable
	S2- No feasibility concerns identified in category.	permanent landmark.
		R2- N/A
		S1- Northern Boundary. See response from MPA
		proposal R1 above.
		S2- Northern Boundary. See response from MPA
		proposal R1 above.

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Area	Proposal- MPA / Cluster Design	Proposal- MPA Boundaries
Reading Rock	R1- MPA Design. Boundary design creates an awkward shape due to the unusual configuration of the state water boundary. In this instance, enforceability and public understanding would be improved if boundaries were simplified by using straight lines adjacent to the 3 mile contour (to create a box or triangle). Also, allows boat-based uses in a close nearshore area, which causes enforcement concern. R1- Cluster Design. Design creates a nearshore intertidal MPA. Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected and include take allowances consistent with protecting natural diversity and the life history needs of organisms contained within the MPA or MPA cluster. R2- MPA Design. See response above. R2-Cluster Design. See response above. S1- No feasibility concerns identified in category. S2- No feasibility concerns identified in category.	R1- Northern and Southern Boundaries. Boundaries split a beach. Enforceability and public understanding would be improved if boundaries were moved to an easily recognizable permanent landmark. R2- Northern and Southern Boundaries. See response from MPA proposal R1 above. S1- Northern and Southern Boundaries. See response from MPA proposal R1 above. S2- Northern and Southern Boundaries. See response from MPA proposal R1 above.
Stone Lagoon	R1- No feasibility concerns identified in category. R2- N/A S1- N/A S2- N/A	R1- No feasibility concerns identified in category. R2- N/A S1- N/A S2- N/A

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Area	Proposal- MPA / Cluster Design	Proposal- MPA Boundaries
Samoa	R1- No feasibility concerns identified in category. R2- N/A S1- N/A S2- N/A	R1- Northern and Southern Boundaries. Boundaries split a beach. Enforceability and public understanding would be improved if boundaries were moved to an easily recognizable permanent landmark. R2- N/A S1- N/A S2- N/A
North Humboldt Bay	R1- No feasibility concerns identified in category. R2- N/A S1- No feasibility concerns identified in category. S2- N/A	R1- Southern Boundary. Southern boundary location should be cleaned up in MarineMap to reflect the written description. Northern Boundary. Feasibility could be improved if boundary location was moved to the west so the boundary could continue the angle of the shore. R2- N/A S1- Southern Boundary. See response from MPA proposal R1 above. S2- N/A

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Area	Proposal- MPA / Cluster Design	Proposal- MPA Boundaries
South Humboldt Bay	R1- No feasibility concerns identified in category. R2- MPA Design. MPA design reduces enforceability and public understanding. The Department recommends the use of easily recognizable permanent landmarks to delineate boundaries in inland waters (e.g. bays, estuaries, sloughs, lagoons, etc). S1- MPA Design. See response from MPA proposal R2 above. S2- MPA Design. See response from MPA proposal R2 above.	R1- Boundary. Eastern location of boundary is not at an easily recognizable permanent landmark. R2- Eastern Boundary. Utilizes whole minutes of longitude. The Department recommends the use of easily recognizable permanent landmarks to delineate boundaries in inland waters (e.g. bays, estuaries, sloughs, lagoons, etc). R2- Hanging Corner. Hanging Corners do not meet feasibility guidelines. Designs such as this, especially in inland waters where less equipped boat based users are likely to occur, reduce enforceability and public understanding. S1- Northern and Eastern Boundaries. Utilizes whole minutes of longitude. The Department recommends the use of easily recognizable permanent landmarks to delineate boundaries in inland waters (e.g. bays, estuaries, sloughs, lagoons, etc). S1- Hanging Corner. See response from MPA proposal R2 above. S2- Eastern Boundary and Hanging Corner. See response from MPA proposal R2 above.
South Cape Mendocino	R1- Multiple Zoning. Does not meet feasibility guidelines regarding multiple zoning with three MPAs proposed in the area. R2- Multiple Zoning. See response from MPA proposal R2 above. S1- Multiple Zoning. Does not meet feasibility guidelines regarding multiple zoning with four MPAs proposed in the area. S2- Multiple Zoning. See response from MPA proposal S1 above.	R1- No feasibility concerns identified in category. R2- No feasibility concerns identified in category. S1- No feasibility concerns identified in category. S2- No feasibility concerns identified in category.

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Area	Proposal- MPA / Cluster Design	Proposal- MPA Boundaries
Mattole	R1- MPA Design. MPA design does not follow feasibility	R1- No feasibility concerns identified in category.
Canyon	guidelines because MPA does not extend to shore. Note	R2- No feasibility concerns identified in category.
	that the Commission has, in limited specific	S1- No feasibility concerns identified in category.
	circumstances, made exceptions to this guideline for	S2- No feasibility concerns identified in category.
	specific key and unique habitats. 2 If the NCRSG desires	
	to restrict protection to the canyon habitat only,	
	enforcement prefers the options that start further offshore	
	to avoid confusion for nearshore users.	
	R1- Multiple Zoning. Does not meet feasibility guidelines	
	regarding multiple zoning with three MPAs proposed in the	
	area.	
	R2- MPA Design. See response from MPA proposal R1	
	above.	
	R2- Multiple Zoning . See response from MPA proposal	
	S1 above.	
	S1- MPA Design. See response from MPA proposal R1	
	above.	
	S1- Multiple Zoning. See response from MPA proposal	
	S1 above.	
	S2- MPA Design. See response from MPA proposal R1	
	above.	
	S2- Multiple Zoning. See response from MPA proposal	
	S1 above.	

² The Fish and Game Commission approved three off-shore MPAs in the central coast study region that served to protect canyon habitat (Soquel Canyon SMCA and Portuguese Ledge SMCA) and to protect a rocky pinnacle (Carmel Pinnacles SMR).

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Area	Proposal- MPA / Cluster Design	Proposal- MPA Boundaries
Petrolia	R1- Multiple Zoning. Does not meet feasibility guidelines	R1- No feasibility concerns identified in category.
Lighthouse	regarding multiple zoning with three MPAs proposed in the	R2- No feasibility concerns identified in category.
	area.	S1- No feasibility concerns identified in category.
	R2- Multiple Zoning. See response from MPA proposal	S2- No feasibility concerns identified in category.
	R1 above.	
	S1- Multiple Zoning. Does not meet feasibility guidelines	
	regarding multiple zoning with four MPAs proposed in the	
	area.	
	S2- Multiple Zoning. See response from MPA proposal	
	S1 above.	
Big Flat	R1- N/A	R1- No feasibility concerns identified in category.
	R2- N/A	R2- No feasibility concerns identified in category.
	S1- Multiple Zoning. Does not meet feasibility guidelines	S1- No feasibility concerns identified in category.
	regarding multiple zoning with four MPAs proposed in the	S2- No feasibility concerns identified in category.
	area.	
	S2- Multiple Zoning. See response from MPA proposal	
	S1 above.	
Viscaino	R1- No feasibility concerns identified in category.	R1- South Eastern Corner. Creates a hanging corner
	R2- No feasibility concerns identified in category.	that reduces enforceability and public understanding.
	S1- No feasibility concerns identified in category.	R2- South Eastern Corner. See response from MPA
	S2- No feasibility concerns identified in category.	proposal R1 above.
		S1- South Eastern Corner. See response from MPA
		proposal R1 above.
		S2- No feasibility concerns identified in category.

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Area	Proposal- MPA / Cluster Design	Proposal- MPA Boundaries
Ten Mile Beach	R1- Cluster Design. Design creates a nearshore intertidal MPA. Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected and include take allowances consistent with protecting natural diversity and the lifehistory needs of organisms contained within the MPA or MPA cluster. R2- N/A S1- MPA Cluster Design. See response from MPA proposal R1 above. Also, boundary description not complete. Shape provided in MarineMap shows a diagonal line that does not meet feasibility guidelines. S2- MPA Cluster Design. See response from MPA proposal S1 above.	R1- No feasibility concerns identified in category. R2- No feasibility concerns identified in category. S1- No feasibility concerns identified in category. S2- No feasibility concerns identified in category.
Ten Mile Estuary	R1- No feasibility concerns identified in category. R2- No feasibility concerns identified in category. S1- No feasibility concerns identified in category. S2- No feasibility concerns identified in category.	R1- Eastern Boundary. The eastern inland boundary should be placed at an easily recognizable permanent landmark. R2- Eastern Boundary. See response from MPA proposal R1 above. S1- Eastern Boundary. See response from MPA proposal R1 above. S2- Eastern Boundary. See response from MPA proposal R1 above.

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Area	Proposal- MPA / Cluster Design	Proposal- MPA Boundaries
MacKerricher State Park	R1- MPA Design. Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected and include take allowances consistent with protecting natural diversity and the life history needs of organisms contained within the MPA or MPA cluster. R2- N/A S1- MPA Design. See response from MPA proposal R1 above.	R1- MPA Boundaries. Boundaries do not follow a due north-south, east-west orientation, the offshore boundary is defined by a depth contour, and the boundaries are not located at readily determined lines of latitude and longitude or at easily recognizable landmarks. R2- N/A S1- MPA Boundaries. Boundaries split a beach. Enforceability and public understanding would be improved if boundaries were moved to an easily recognizable permanent landmark. S2- N/A
Point Cabrillo	S2- N/A R1- MPA Design. Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected and include take allowances consistent with protecting natural diversity and the life-history needs of organisms contained within the MPA or MPA cluster. R2- N/A S1- MPA Design. See response from MPA proposal R1 above. S2- MPA Design. See response from MPA proposal R1 above.	R1- No feasibility concerns identified in category. R2- N/A S1- MPA boundaries. Written boundary description does not match the shape provided in MarineMap. Written description includes the use of distance offshore, which does not meet feasibility guidelines. The MPA shape provided in MarineMap also does not appear to meet feasibility guidelines as offshore boundary is not located at a readily determinable line of longitude. As the written description does not match the shape provided, it is also unclear if the onshore boundaries meet guidelines. S2- MPA boundaries. See response from MPA proposal S1 above.

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Area	Proposal- MPA / Cluster Design	Proposal- MPA Boundaries
Russian Gulch	R1- MPA Design. Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected and include take allowances consistent with protecting natural diversity and the lifehistory needs of organisms contained within the MPA or MPA cluster. R2- N/A S1- N/A S2- N/A	R1- MPA Boundaries. Boundaries do not follow a due north-south, east-west orientation; offshore boundary is defined by a depth contour; and boundaries are not located at readily determined lines of latitude and longitude or at a easily recognizable landmarks. R2- N/A S1- N/A S2- N/A

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Area	Proposal- MPA / Cluster Design	Proposal- MPA Boundaries
Big River Estuary	R1- No feasibility concerns identified in category. R2- No feasibility concerns identified in category. S1- No feasibility concerns identified in category. S2- No feasibility concerns identified in category.	R1- Eastern boundary. The eastern inland boundary should be placed at an easily recognizable permanent landmark. Western Boundary. Upon enforcement review the old bridge abutment was not considered an adequate landmark for use as an MPA boundary. If an MPA boundary is to be placed in this general area, enforcement suggests the use of the nearby Highway 1 bridge, as it is clearly determinable on both sides of the estuary. R2- Eastern and Western Boundaries. See responses from MPA proposal R1 above. S1- Eastern Boundary. See response from MPA proposal R1 above. S1- Western Boundary. Written boundary descriptions not clear in MarineMap. The Department recommends the use of easily recognizable permanent landmarks to delineate boundaries in inland waters (e.g. bays, estuaries, sloughs, lagoons, etc). S2- Eastern and Western Boundaries. See responses
		from MPA proposal S1 above.

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Area	Proposal- MPA / Cluster Design	Proposal- MPA Boundaries
Van Damme	R1- MPA Design. Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected and include take allowances consistent with protecting natural diversity and the life-history needs of organisms contained within the MPA or MPA cluster. R2- N/A S1- N/A S2- N/A	R1- MPA Boundaries. Offshore boundary is defined by a depth contour, and boundaries are not located at readily determined lines of latitude and longitude or at a easily recognizable landmarks. R2- N/A S1- N/A S2- N/A
Albion River Estuary	R1- N/A R2- N/A S1- No feasibility concerns identified in category. S2- N/A	R1- N/A R2- N/A S1- Eastern and Western Boundaries. The eastern and western boundaries should be placed at easily recognizable permanent landmarks. For example, the Highway 1 bridge could be used to delineate the western boundary. S2- N/A
Navarro River Estuary	R1- No feasibility concerns identified in category. R2- No feasibility concerns identified in category. S1- No feasibility concerns identified in category. S2- N/A	R1- Eastern boundary. The eastern inland boundary should be placed at an easily recognizable permanent landmark. R2- Eastern Boundary. See response from MPA proposal R1 above. S1- Eastern Boundary. See response from MPA proposal R1 above. S2- N/A

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Table 3. Department of Fish and Game feasibility comments regarding MPA boundaries, design, take allowances, and MPA type for Round 2 MPAs by area (N/A indicates the array did not propose an MPA in the area). Proposals are indicated as follows: R1: Ruby 1, R2: Ruby 2, S1: Sapphire 1, S2: Sapphire 2.

Area	Proposal- Proposed Take Regulations	Proposal- Other Proposed Regulations		
Pyramid Point	R1- Unspecified take* R2- Unspecified take* S1- No feasibility concerns identified in category. S2- No feasibility concerns identified in category.	R1- None Specified R2- None Specified S1- Co-Management is recommended. This would be advanced as separate recommendation (via "other design considerations) rather than a proposed regulation. S2- Co-Management is recommended. See advice under		
Point St. George	R1- No feasibility concerns identified in category. R2- N/A S1- N/A S2- N/A	S1 above. R1- None Specified R2- N/A S1- N/A S2- N/A		
Wilson Rock / False Klamath Cove	R1- Unspecified take* R2- N/A S1- Unspecified take* S2- Unspecified take*	R1- Co-Management is recommended. This would be advanced as separate recommendation (via "other design considerations) rather than a proposed regulation. S2- Co-Management is recommended. See advice under R1 above. R2- N/A S1- Co- Management is recommended. See advice under R1 above. S2- Co- Management is recommended. See advice under R1 above.		

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Area	Proposal- Proposed Take Regulations	Proposal- Other Proposed Regulations	
Reading Rock	R1- Unspecified take**	R1- None Specified	
	R1- Complex regulations. A long list of excepted	R2- None Specified	
	species to the general regulation makes it difficult to	S1- Co-Management is recommended. This would be	
	understand and enforce the regulation.	advanced as separate recommendation (via "other design	
	R2- Unspecified take**	considerations) rather than a proposed regulation.	
	R2- Complex regulations. See response from MPA	S2- Co-Management is recommended. See advice under	
	proposal R1 above.	S1 above.	
	S1- Unspecified take*		
	S2- Unspecified take*		
Stone Lagoon	R1- Unspecified take*	R1- None Specified	
	R2- N/A	R2- N/A	
	S1- N/A	S1- N/A	
	S2- N/A	S2- N/A	
Samoa	R1- No feasibility concerns identified in category.	R1- Beach Replenishment Activities identified. This is	
	R2- N/A	appropriate to call out here.	
	S1- N/A	R2- N/A	
	S2- N/A	S1- N/A	
		S2- N/A	

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Area	Proposal- Proposed Take Regulations	Proposal- Other Proposed Regulations		
North	R1- Unspecified take*	R1- Permit Exemptions. An MPA designation cannot		
Humboldt Bay	R2- N/A	exempt projects from the permitting process. Existing		
	S1- Unspecified take*	permitted activities in the MPA should be noted and allowed		
	S2- N/A	to continue.		
		R1- Invasive Species. The removal of invasive species		
		from an MPA is not a defined regulated activity that should		
		be applied to an individual MPA.		
		R2- N/A		
		S1- Co-Management is recommended. This would be		
		advanced as separate recommendation (via "other design		
		considerations) rather than a proposed regulation.		
		S1- Permit Exemptions. See response from MPA proposal		
		R1 above.		
		R1- Identifies existing oyster lease. This is appropriate to		
		call out as an allowed use.		
		S2- N/A		

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	Proposal- Proposed Take Regulations	Proposal- Other Proposed Regulations
South	R1- Unspecified take*	R1- Permit Exemptions. An MPA designation can not
Humboldt Bay	R2- Unspecified take*	exempt projects from the permitting process. Existing
	S1- Unspecified take*	permitted activities in the MPA should be noted and allowed
	S2- Unspecified take*	to continue.
		R1- Invasive Species. The removal of invasive species
		from an MPA is not a defined regulated activity that should
		be applied to an individual MPA.
		R2- Invasive Species. See response from MPA proposal
		R1 above.
		R2- Take of Green Crab. Recommendations such as this
		are not appropriate in the regulations section. These should
		be moved to the "other considerations" section.
		S1- Co-Management is recommended. This would be
		advanced as separate recommendation (via "other design
		considerations) rather than a proposed regulation.
		S2- Co-Management is recommended. See advice under
		S1 above.
		S2- Permit and Blanket Exemptions. An MPA designation
		can not exempt projects, or project categories such as those
		for restoration or sea level rise, from the permitting process.
		Existing permitted activities in the MPA should be noted and allowed to continue.
South Cape	R1- No feasibility concerns identified in category.	R1- None Specified
Mendocino	R2- No feasibility concerns identified in category.	R2- None Specified
Mendocino	S1- No feasibility concerns identified in category.	S1- None Specified
	S2- No feasibility concerns identified in category.	S2- None Specified
Mattole	, , , , , , , , , , , , , , , , , , , ,	· · · · · · · · · · · · · · · · · · ·
	R1- No feasibility concerns identified in category.	R1- None Specified
Canyon	R2- No feasibility concerns identified in category.	R2- None Specified S1- None Specified
	S1- No feasibility concerns identified in category.S2- No feasibility concerns identified in category.	S2- None Specified
	32- No reasibility concerns identified in category.	32- None Specified

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Area	Proposal- Proposed Take Regulations	Proposal- Other Proposed Regulations	
Petrolia	R1- No feasibility concerns identified in category.	R1- None Specified	
Lighthouse	R2- No feasibility concerns identified in category.	R2- None Specified	
	S1- No feasibility concerns identified in category.	S1- None Specified	
	S2- Unspecified take*	S2- Co-Management is recommended. This would be	
		advanced as separate recommendation (via "other design	
		considerations) rather than a proposed regulation.	
Big Flat	R1- N/A	R1- N/A	
	R2- N/A	R2- N/A	
	S1- No feasibility concerns identified in category.	S1- None Specified	
	S2- No feasibility concerns identified in category.	S2- None Specified	
Viscaino	R1- No feasibility concerns identified in category.	R1- None Specified	
	R2- No feasibility concerns identified in category.	R2- None Specified	
	S1- No feasibility concerns identified in category.	S1- None Specified	
	S2- No feasibility concerns identified in category.	S2- None Specified	
Ten Mile	R1- Unspecified take*	R1- None Specified	
Beach	R2- N/A	R2- N/A	
	S1- Unspecified take*	S1- Co-Management is recommended. This would be	
	S2- Unspecified take*	advanced as separate recommendation (via "other design	
		considerations) rather than a proposed regulation.	
		S2- Co-Management is recommended. See advice under	
		S1 above.	

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Area	Proposal- Proposed Take Regulations	Proposal- Other Proposed Regulations		
Ten Mile	R1- Unspecified take*	R1- Invasive Species. The removal of invasive species		
Estuary	R2- Unspecified take*	from an MPA is not a defined regulated activity that should		
	S1- Unspecified take*	be applied to an individual MPA.		
	S2- Unspecified take*	R2- Invasive Species. See response from MPA proposal		
	_	R1 above.		
		R2- Take of Green Crab. Recommendations such as this		
		are not appropriate in the regulations section. These should		
		be moved to the "other considerations" section.		
		S1- Co-Management is recommended. This would be		
		advanced as separate recommendation (via "other design		
		considerations) rather than a proposed regulation.		
		S2- Co-Management is recommended. See advice under		
		S1 above.		
MacKerrricher	R1- Complex Regulations and Low LOP. Provides	R1- None Specified		
State Park	little protection ecologically and results in complex	R2- N/A		
	regulations due to the extensive allowed take.	S1- None Specified		
	R2- N/A	S2- N/A		
	S1- Complex Regulations and Low LOP. See			
	response from MPA proposal R1 above.			
	S2- N/A			
Point Cabrillo	R1- Unspecified take*	R1- None Specified		
	R2- N/A	R2- N/A		
	S1- Unspecified take**	S1- Co-Management is recommended. This would be		
	S1- Extensive Allowed Take. Provides little	advanced as separate recommendation (via "other design		
	protection ecologically and results in complex	considerations) rather than a proposed regulation.		
	regulations due to the extensive allowed take.	S2- Co-Management is recommended. See advice under		
	S2- Unspecified take**	S1 above.		
	S1- Extensive Allowed Take. See response from			
	MPA proposal S1 above.			

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Area	Proposal- Proposed Take Regulations	Proposal- Other Proposed Regulations		
Russian Gulch	R1- Complex Regulations and Low LOP. Provides	R1- None Specified		
	little protection ecologically and results in complex	R2- N/A		
	regulations due to the extensive allowed take.	S1- N/A		
	R2- N/A	S2- N/A		
	S1- N/A			
	S2- N/A			
Big River	R1- Unspecified take*	R1- Invasive Species. The removal of invasive species		
Estuary	R2- Unspecified take*	from an MPA is not a defined regulated activity that should		
	S1- Unspecified take* Enforcement would prefer	be applied to an individual MPA.		
	marine regulations to be consistent with regulations.	R2- Invasive Species. See response from MPA proposal		
	S2- Unspecified take*	R1 above.		
		S1- Co-Management is recommended. This would be		
		advanced as separate recommendation (via "other design		
		considerations) rather than a proposed regulation. S2- Co-Managemen t is recommended. See advice under		
		S1 above.		
Van Damme	R1- Complex Regulations and Low LOP. Provides	R1- None Specified		
Vali Dallille	little protection ecologically and results in complex	R2- N/A		
	regulations due to the extensive allowed take.	\$1- N/A		
	R2- N/A	S2- N/A		
	S1- N/A	62 14/70		
	S2- N/A			
Albion River	R1- N/A	R1- N/A		
Estuary	R2- N/A	R2- N/A		
	S1- Unspecified take* Enforcement would prefer	S1- Co-Management is recommended. This would be		
	marine regulations to be consistent with regulations.	advanced as separate recommendation (via "other design		
	S2- N/A	considerations) rather than a proposed regulation.		
		S2- N/A		

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Area	Proposal- Proposed Take Regulations	Proposal- Other Proposed Regulations
Navarro River	R1- Unspecified take*	R1- Invasive Species. The removal of invasive species
Estuary	R2- Unspecified take*	from an MPA is not a defined regulated activity that should
	S1- Unspecified take*	be applied to an individual MPA.
	S2- N/A	R2- Invasive Species. See response from MPA proposal
		R1 above.
		R2- Take of Green Crab. Recommendations such as this
		are not appropriate in the regulations section. These should
		be moved to the "other considerations" section.
		S1- Co-Management is recommended. This would be
		advanced as separate recommendation (via "other design
		considerations) rather than a proposed regulation.
		S2- N/A

^{*} Take was not specified in Round 2 MPAs where the intent was to allow tribal gathering and harvest. Allowed take for each MPA identified in Round 3 should be explicitly stated, indicate if take is recreational or commercial, and include specific species and gear types. Allowed take must apply to all recreational users or commercial users. This guidance applies to all MPAs proposed in Round 2 with this type of unspecified allowed take.

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Part II. Evaluation of Proposed MPA Goals and Objectives

Overview:

The MLPA requires that objectives be specified for all MPAs [Fish and Game Code, subsections 2853(c)(2) and 2857(c)(1)] developed under the MLPA. In response, the NCRSG has reviewed the six MLPA goals and reviewed and approved regional objectives for each of the goals³. In determining MPA-specific objectives, the NCRSG selected goals and regional objectives for each MPA. In assigning these goals and regional objectives to specific MPAs, the NCRSG attempted to determine the suite of objectives that best apply to the design and intent of individual MPAs. The application of these goals and objectives to specific MPAs serves an important role as tools for MPA design (influencing the allowed uses, boundaries, and specific placement of MPAs).

The Department Round 2 Goals and Objectives Evaluation is founded on MLPA Science Advisory Team (SAT) science guidelines, Department feasibility guidelines, and the MLPA I-Team's guidance for meeting Goal 3. To help facilitate the evaluation, the Department developed a table of criteria that an objective should meet when assigned to an MPA (Table 4). The criteria table was designed to help determine whether an objective can be realistically achieved based on the MPA design. These criteria consider evaluation results such as SAT-determined level of protection (LOP), size and spacing, habitat replication and representation, Department feasibility guidelines, and Goal 3 guidelines.

Table 4. Criteria for an MPA to meet MLPA goals and regional objectives used in the Department of Fish and Game evaluation of identified goals and regional objectives for proposed MPAs in the North Coast Study Region.

Goal & Objective	Criteria to Meet the Goals and Objectives ¹		
key habitat(s)	OP is moderate-high or above; meets minimum size guidelines; includes		
Objective 1 Objective 2 Objective 3 Objective 4 Objective 4 Objective 5 Objective 5 Objective 5 Objective 5 LOP must be moderate-high or above; MPA must meet the SAT's minimum size guidelines or is part of a cluster that meets the minimum guidelines; MPA contains at least one key habitat that meets the SAT's habitat quantity (e.g., size, area, or linear miles) threshold			
Goal 2. Criteria: LOP is moderate-high or above; meets size and spacing guidelines			
Objective 1 Objective 2 Objective 3	LOP must be moderate-high or above; MPA must meet the SAT's size and spacing guidelines		

³ For reference, the goals and regional objectives for MPAs in the NCSR can be found at: http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentVersionID=33653

Goal &			
Objective	Criteria to Meet the Goals and Objectives ¹		
Objective 4 LOP must be moderate-high or high; MPA must meet the SAT's size a spacing guidelines; state marine reserves should not include this objective.			
Goal 3. ² Criteria: LOP is moderate-high or above, or valid rationale is provided if below t LOP; site-specific rationale refers to intent of Goal 3 per Goal 3 guidelines			
Objective 1	LOP must be moderate-high or above and/or should provide clear rationale for using Goal 3 per the Goal 3 guidelines		
Objective 2	LOP must be moderate-high or above and/or be located near a research facility and/or provide for educational opportunities; MPA should provide		
Objective 3	clear rationale for using Goal 3 per the Goal 3 guidelines if LOP is below moderate-high		
Goal 4. Criteria: L key habitats	OP is moderate-high or above; meets minimum size guidelines; includes		
Objective 1	LOP must be moderate-high or above; MPA must meet the SAT's minimum size guidelines or is part of a cluster that meets the minimum size guidelines; MPA contains at least one key habitat that meets the SAT's habitat quantity (e.g., size, area, or linear miles) threshold		
LOP must be moderate-high or above; MPA must meet the SAT's minimum size guidelines or is part of a cluster that meets the min Objective 2 guidelines; MPA contains at least one key habitat that meets the habitat quantity (e.g., size, area, or linear miles) threshold; MPA extend from nearshore to offshore or contain a range depths			
Goal 5. Criteria: 7 criteria below for e	This goal must be paired with another goal or other goals and must follow each objective		
Objective 1	All MPAs in a proposal link to the regional objectives.		
Objective 2	tive 2 MPA meets at least one SAT guidelines		
Objective 3	MPA adheres to Fish and Game feasibility guidelines or State Parks guidelines		
Objective 4 MPA site-specific rationale is clear and concise and includes a biological statement			
Goal 6. Criteria: Key habitats included; meets meeting size and spacing guidelines			
Objective 1 Objective 2	MPA must meet the size and spacing guidelines; MPA must contain at least one key habitat that meets the SAT's habitat quantity (e.g., size, area, or linear miles) threshold		

On a case-by-case basis, some objectives may be appropriate for an MPA but may not meet the criteria in this table. Justification for the exception should be stated in the rationale.

Each MPA that is developed under the MLPA must contribute to meeting one or more of the MLPA goals. Therefore, the Department's Round 2 evaluation first identifies if MPA design will contribute to at least one goal, and then identifies whether the objectives assigned to each goal are realistically achievable based on the MPA's design. The evaluation within this document reviews each proposal to highlight what goals and/or

² Goal 3 can not be paired with other objectives under Goal 1, 2, 4, and 6 unless it also meets the criteria for those goals.

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objectives are inappropriately applied to an MPA. The following tables (Tables 5 through 8) highlight individual MPAs, the goals and objectives selected for each MPA, the goals and objectives that are inappropriate for an MPA, and suggestions are given to remedy MPA design to better help achieve those identified goals. MPAs that did not include problematic goals and objectives were not included in the tables below. Additionally, this evaluation provides overarching comments on all of the proposals and includes options to improve the selection of the goals and objectives for Round 3. This evaluation provides further comments on improving the language in the site-specific rationale which should help the NCRSG make better choices when pairing goals and objectives to site-specific rationales.

Undetermined Levels of Protection Due to Unspecified Take

MPAs that did not explicitly state the allowed take were challenging to evaluate due to the undetermined LOP. During this evaluation, the goals and objectives were only evaluated using known LOPs, so could not address MPAs with undetermined take regulations. In order for the Department to perform a complete review on the goals and objectives for Round 3, each MPA will need to have clearly specified allowed take and corresponding LOP designation. The NCRSG can anticipate that MPAs with an LOP below moderate-high will no longer meet criteria for meeting many of the goals (as provided in Table 4), as these goals would not be realistically achievable. Although these MPAs could not be commented on in Round 2, this evaluation includes some general comments that provide guidance for goals and objectives in Round 3 MPA proposals.

Table 5. Goals and Regional Objectives for MPAs in Ruby Draft MPA Proposal 1 (Ruby 1)

Proposal: Ruby 1				
Proposed MPA Name	Proposed Goals and Regional Objectives	Goals and Objectives Not Appropriate Based on MPA Design	Options to Remedy ¹	
Pyramid Point SMR	G1: (O-2, O-3, O-4), G2: (O-1,O-2), G4: (O-1, O-2), G6: (O-1, O-2)	G:4: (O-2)	If part of cluster then OK, otherwise remove objective or extend MPA all the way to shore.	
Point St. George Reef SMCA	G3: (O-2), G4: (O-1, O-2)	G3: (O-2)	Provide Clear justification for including Goal 3.	
False Klamath Cove SMCA	G1: (O-1, O-2, O-4), G2: (O-2), G3: (O-3), G5: (O-2), G6: (O-1, O-2)	G3: (O-3)	Provide Clear justification for including Goal 3.	

Proposal: Ruby 1					
Proposed MPA Name	Proposed Goals and Regional Objectives	Goals and Objectives Not Appropriate Based on MPA Design	Options to Remedy ¹		
Reading Rock Nearshore SMCA	G2: (O-4), G3: (O-2), G4: (O-1)	G2: (O-4), G3: (O-2), G4: (O-1)	Increase LOP for currently listed allowed usages. Provide Clear justification for including Goal 3.		
Mattole Canyon SMR	G1: (O1, O-2, O-3), G3: (O-1) G4: (O-1), G5: (O-1, O-2, O-3), G6: (O-1)	G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns.		
Petrolia Lighthouse SMR	G1: (O-1, O-2, O-5), G3: (O-1,O-2), G4: (O-1, O-2), G5: (O-3, O-4)	G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns.		
Ten Mile SMR	G1: (O-2, O-3, O-5) G2: (O-2, O-3) G3: (O-1, O-2), G5: (O-2, O-3) G6: (O-1, O-2)	G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns.		
Ten Mile SMCA	G1: (O-2, O-3, O-5), G2: (O-2, O-3), G3: (O-1, O-2), G5: (O-2, O-3), G6: (O-1, O-2)	G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns.		
Ten Mile Estuary SMCA	G1: (O-4), G2: (O-3), G3: (O-1, O-3), G4: (O-2), G5: (O-2, O-3)	G4: (O-2)	Remove objective (objective not applicable) and replace with Goal 4, Objective 1 which is better suited for estuary MPAs.		
Russian Gulch SMCA	G3: (O-1)	G3: (O-1)	Improve boundaries or reduce take allowances to meet Goal 3 (Retains existing MPA).		
Big River Estuary SMP	G1: (O-4), G2: (O-3), G3: (O-1, O-3), G4: (O-2), G5: (O2, O-3), G6: (O-2)	G4: (O-2), G5: (O-3)	Remove objective (objective not applicable) and replace with Goal 4, Objective 1 which is better suited for estuary MPAs. See Table 2 and 3 to improve Department feasibility concerns.		
Van Damme SMCA	G3: (O-1)	G3: (O-1)	Improve boundaries or reduce take allowances to meet Goal 3 (Retains existing MPA).		
Navarro River Estuary SMCA	G1: (O-3, O-4), G2: (O-3), G3: (O-1, O-3), G4: (O-2), G6: (O-2)	G1: (O-3, O-4), G2: (O-3), G4: (O-2)	Increase LOP for currently listed allowed usages. Remove G4 (O-2) (objective not applicable) and replace with G4 (O-1) which is better suited for estuary MPAs		

Theses are the recommended suggestions to improve the likelihood the MPA will meet the goals of the Act. If the design and/or associated regulations of the MPA can not be altered, then the problem goal should be removed or the MPA should not be considered within the proposal.

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Table 6. Goals and Regional Objectives for MPAs in Ruby Draft MPA Proposal 2 (Ruby 2)

Proposal: Ruby 2					
Proposed MPA Name	Goals and Regional Objectives	Goals and Objectives Not Appropriate Based on MPA Design	Options to Remedy ¹		
Pyramid Point SMCA	G2: (O-1,O-2)	G2: (O-1,O-2)	Increase LOP for currently listed allowed usages.		
Reading Rock Nearshore SMCA	G4: (O-2)	G4: (O-2)	Increase LOP for currently listed allowed usages.		
Reading Rock Offshore SMCA	G1: (O-2), G4: (O-1,O-2), G6: (O-1)	G6: (O-1)	Decrease spacing gap between adjacent MPA to the south.		
South Cape Mendocino SMR	G1: (O-1, O-2, O-5), G2: (O-2) G3: (O-2), G4: (O-1), G5: (O-4) G6: (O-1, O-2)	G2: (O-2), G6: (O-1, O-2)	Decrease spacing gap between adjacent MPA to the north.		
Mattole Canyon SMR	G1: (O1, O-2, O-3), G3: (O-1) G4: (O-1), G5: (O-1, O-2, O-3), G6: (O-1)	G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns.		
Petrolia Lighthouse SMR	G1: (O-1, O-2, O-5), G3: (O-1,O-2), G4: (O-1, O-2), G5: (O-3, O-4)	G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns.		
Ten Mile Estuary SMCA	G1: (O-4), G2: (O-3), G3: (O-1, O-3), G5: (O-2, O-3)	G5: (O-3), G4: (O-2)	See Table 2 and 3 to improve Department feasibility concerns. Remove G4 (O-2) (objective not applicable) and replace with G4 (O-1) which is better suited for estuary MPAs.		
Big River Estuary SMP	G1: (O-4), G2: (O-3), G3: (O-1, O-3), G4: (O-2), G5: (O2, O-3), G6: (O-2)	G4: (O-2),G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns. Remove G4 (O-2) (objective not applicable) and replace with G4 (O-1) which is better suited for estuary MPAs		
Navarro River Estuary SMCA	G1: (O-3, O-4), G2: (O-3), G3: (O-1, O-3), G4: (O-2), G6: (O-2)	G1: (O-3, O-4), G2: (O-3), G4: (O- 2)	Increase LOP for currently listed allowed usages. Remove G4 (O-2) (objective not applicable) and replace with G4 (O-1) which is better suited for estuary MPAs		

Theses are the recommended suggestions to improve the likelihood the MPA will meet the goals of the Act. If the design and/or associated regulations of the MPA can not be altered, then the problem goal should be removed or the MPA should not be considered within the proposal.

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Table 7. Goals and Regional Objectives for MPAs in Sapphire Draft MPA Proposal 1 (Sapphire 1)

Proposed MPA	Goals and Regional	Goals and Objectives Not Appropriate Based on MPA	
Name	Objectives*	Design	Options to Remedy ¹
Reading Rock SMCA	G2: (O-4)	G2: (O-4)	Decrease spacing gap between adjacent MPA to the south.
South Cape Mendocino SMR	G1: (O-1, O-2, O-5), G5: (O-2), G6: (O-1, O-2)	G1: (O-1, O-2, O-5), G6: (O-1, O-2)	Decrease spacing between adjacent MPA to the north.
Mattole Canyon Offshore SMR	G1: (O1, O-2, O-3), G3: (O-1), G4: (O-1), G5: (O-1, O-2, O-3), G6: (O-1)	G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns.
Petrolia Lighthouse SMR	G1: (O-1, O-2, O-5), G2: (O-2, O-3), G3: (O-1,O-2), G4: (O-1, O-2), G5: (O-3, O-4), G6: (O-1)	G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns.
Big Flat SMCA	G1: (O-3, O-5), G2: (O-1, O-2), G3: (O-1), G4: (O-2), G5: (O- 2), G6: (O-1, O-2)	G3: (O-1)	Provide stronger justification for meeting Goal 3 besides surfing.
Ten Mile SMR	G1: (O-2, O-3, O-5), G2: (O-2, O-3), G3: (O-1, O-2), G4: (O-1, O-2), G5: (O-2, O-3), G6: (O-1, O-2)	G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns.
Ten Mile Estuary SMCA	G1: (O-4), G2: (O-3), G3: (O-1, O-3), G4: (O-2), G5: (O-2, O-3) G6: (O-2)	G4: (O-2), G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns. Remove G4 (O-2) (objective not applicable) and replace with G4 (O-1) which is better suited for estuary MPAs
Albion River Estuary SMCA	G1: (O-3, O-4), G2: (O-3), G3: (O-1, O-3), G4: (O-2), G6: (O-2)	G1: (O-3, O-4), G2: (O-3), G4: (O- 2)	Increase LOP for currently listed allowed usages. Remove G4 (O-2) (objective not applicable) and replace with G4 (O-1) which is better suited for estuary MPAs

Theses are the recommended suggestions to improve the likelihood the MPA will meet the goals of the Act. If the design and/or associated regulations of the MPA can not be altered, then the problem goal should be removed or the MPA should not be considered within the proposal.

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Table 8. Goals and Regional Objectives for MPAs in Sapphire Draft MPA Proposal 2 (Sapphire 2)

Proposal: Sapphire 2				
Proposed MPA Name	Goals Regional Objectives*	Goals and Objectives Not Appropriate Based on MPA Design	Options to Remedy ¹	
Wilson Rock SMCA	G1: (O-1, O-2, O-4), G2: (O-2 G3: (O-2), G4: (O-1, O-2), G5: (O-2, O-3) G6: (O-1, O-2)	G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns.	
Reading Rock SMCA	G1: (O-1, O-2, O-3, O-4), G2: (O-4)	G2: (O-4)	Decrease spacing gap between adjacent MPA to the south.	
South Cape Mendocino SMR	G1: (O-1, O-2, O-5), G5: (O-2) G6: (O-1, O-2)	G6: (O-1, O-2)	Decrease spacing gap between adjacent MPA to the north.	
Petrolia Lighthouse SMCA	G1: (O-1, O-2, O-5), G3: (O-1,O-2), G4: (O-1, O-2), G5: (O-3, O-4)	G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns.	
Big Flat SMCA	G1: (O-3, O-5), G2: (O-1, O-2), G3: (O-1), G4: (O-2, O-4), G5: (O-2), G6: (O-1, O-2)	G3: (O-1)	Provide stronger justification for meeting Goal 3 besides surfing.	
Vizcaino SMCA	G1: (O-2, O-4), G2: (O-3), G3: (O-1, O-2), G4: (O-1, O-2), G5: (O-3, O-4), G6: (O-1, O-2)	G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns.	
Ten Mile SMR	G1: (O-2, O-3, O-5), G2: (O-2, O-3), G3: (O-1, O-2), G4: (O-1, O-2), G5: (O-2, O-3,), G6: (O-1, O-2)	G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns.	
Ten Mile SMCA	G1: (O-2, O-3), G2: (O-2, O-4) G3: (O-1, O-2), G4: (O-1, O-2), G5: (O-2, O-3), G6: (O-1, O-2)	G5: (O-3)	See Table 2 and 3 to improve Department feasibility concerns.	

Theses are the recommended suggestions to improve the likelihood the MPA will meet the goals of the Act. If the design and/or associated regulations of the MPA can not be altered, then the problem goal should be removed or the MPA should not be considered within the proposal.

Overarching Concerns and Department Guidance:

The Department observed common concerns that should be addressed in Round 3 MPA proposals. These concerns fall within two general categories: goals and objectives, and site-specific rationale. Options to remedy these concerns for Round 3 are provided in tables 5 through 8 (above).

Goals and Objectives:

Goals assigned to MPAs must mirror the overall design of the MPA and should be consistent with the site-specific rationale. All MPAs must also identify objectives that

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specifically contribute to one or more goals of the MLPA. The objectives identified for the MPA should be selected only if they meet SAT, Department, or Goal 3 criteria. Optimally, a narrowed set of primary goals and objectives should be identified so that they reflect the MPA design and are measurable over time. An MPA is more likely to achieve its objectives if the set of objectives are concise and consistent with the site-specific rationale. The following highlights common concerns and strengths found in each of the proposal's selection of goals and objectives.

Goal 1:

Objectives 1 through 5

Goal 1 objectives strive to protect biodiversity and to maintain healthy ecosystems. Several proposed MPAs listing Goal 1 objectives do not meet the LOP criteria of moderate-high or above. This issue could be resolved by limiting the take allowances to species with an LOP at moderate-high or above. All proposals appropriately met the minimum size guidelines and included at least one key habitat, both of which are required when assigning Goal 1 objectives to an MPA.

Goal 2:

Objectives 1 through 3

Goal 2 objectives reflect essential criteria of the MLPA to provide for a strong network of MPAs. Several proposed MPAs listing Goal 2 objectives do not meet the LOP criteria of moderate-high or above. This issue could be resolved by limiting the take allowances to species with an LOP at moderate-high or above. Additionally, one geographic region in three proposals (Ruby 2, Sapphire 1, and Sapphire 2) had MPAs with a spacing gap between them (between Reading Rock and South Cape Mendocino. The MPAs in this geographic region should strive to reduce the spacing between them, which is a requirement to meet this goal.

Objective 4

Objective 4 under Goal 2 reflects the desire to include some MPAs within the network that still allow for a limited amount of extraction while also providing ecosystem benefits. Several proposed MPAs listing this objective do not meet the LOP criteria of moderate-high or high. Limiting the take allowances to species with an LOP at moderate-high or above would resolve this issue. To meet this objective, MPAs must also meet the spacing guidelines and must allow some form of recreational or commercial take. All proposals met the objective criterion which states that the MPA must allow some form of recreational or commercial take.

Goal 3:

Objectives 1 though 3

Goal 3 objectives recognize the importance improving recreational, study and educational opportunities while also emphasizing the protection of biodiversity. Some MPAs in the Round 2 proposals did not meet the criteria for Goal 3 as described in the Goal 3 guidance document. Including site-specific rationales that

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provide sufficient justification as to why the MPA meets Goal 3 would help improve MPA's ability to meet this goal. There were also existing MPAs that were retained without any boundary or regulations changes. Keeping the existing MPA without modification does not improve opportunities for research, education, or recreational activities, unless the protection level is increased. The NCRSG should modify existing MPAs to increase the LOP, reduce the take allowances, or redesign the boundaries in order to enhance Goal 3 opportunities. For more information on how well the MPAs met Goal 3 please see the Goal 3 evaluation performed separately.

Goal 4:

Objective 1

Goal 4, Objectives 1 call for protecting key and unique habitats in the study regions. The few MPAs that did not meet this objective was because they had LOPs below moderate-high. Limiting the take allowances to species with an LOP at moderate-high or above would resolve this issue. Most, if not all, MPAs did well with including key and unique habitats.

Goal 4:

Objective 2

Objective 2 under Goal 4 calls for protecting representative habitats across a range of depths. Three issues were identified regarding MPAs that selected this objective. These include not having an LOP at moderate-high or above, assigning this objective to an MPA that does not contain a range of depths, or assigning this objective to an MPA that does not extend from inshore to offshore. Modifying the MPA's design to reflect these criteria would improve the likelihood of the MPA to meet this objective.

Goal 5:

Objective 1

Goal 5, Objective 1 ensures that MPAs are design and created with clear objectives in mind. All proposals met the criteria for this objective by linking regional objectives to each MPA.

Objective 2

Objective 2 under Goal 5 emphasizes using the MLPA science guidelines. Criteria for this objective were met with proposals that linked this objective to an MPA and also met the science guidelines.

Objective 3

Objective 3 directs that MPA boundaries to be easily understood by the public and be enforceable, and calls for the MPA to adhere to the Department's feasibility guidelines. Many proposals inappropriately assigned this objective to MPAs that did not meet the Department's feasibility guidelines. Please see tables 2 and 3 for a complete list of the Department's feasibility concerns and ways to improve feasibility

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in Round 3. If the proponent of the MPA chose not to meet the Department's feasibility guidelines for a specific purpose, then this objective should not be included.

Objective 4

Goal 5, Objective 4 ensures that MPAs are design and created with clear and concise ecological intent in mind. Criteria for this objective were successfully met with proposals that linked this objective to an MPA.

Goal 6:

Objectives 1 and 2

Goal 6 objectives reflect essential criteria to have strong connectivity between MPAs. One geographic region in three proposals (Ruby 2, Sapphire 1, and Sapphire 2) had MPAs with a spacing gap between them (between Reading Rock and South Cape Mendocino). This goal is achieved only if the MPAs in this geographic region meet the preferred spacing guidelines. All the proposals did well in meeting the minimum size guidelines and included one or more key habitats, which are also criteria required when assigning any objectives under Goal 6 to an MPA.

Site-Specific Rationale:

All MPAs need to include site specific rationale. Site-specific rationales must be a concise statement of what the MPA is designed to achieve and why it contributes to each identified goal (i.e., specific biological, ecological, and/or conservation rationale for siting a MPA at this location). The statement should also include identification of biological reasoning or protection goals (i.e., what you want to protect).

Site-specific rationales can be improved for MPAs in each proposal to by adding more specific references to the biological, ecological, or conservation rationale justifying an MPA's design and placement. For example, for rationales that state that a particular habitat threshold is captured, one suggestion is to expand on why capturing that habitat is meaningful (e.g., protect biodiversity, help increase local fish abundance, etc.). This will clarify the intent of the MPA and will provide future monitoring efforts with a clear picture of what the MPA was trying to achieve. Proposals that included existing MPAs with rationales that simply state retention of an existing MPA, or that codify existing regulations without providing a statement as to what that MPA would accomplish should add an explanation of the biological, ecological, or conservation aims of the MPA.

Summary of Guidance for Assigning Goals and Regional Objectives in Round 3 MPA Proposals:

As proposals are refined during Round 3, the following key elements should be applied or considered to help design MPAs that successfully achieve MPA goals and objectives.

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- Focus on the site-specific rationale to ensure that you:
 - Provide a clear and concise statement that provides biological or ecological purpose for the MPA.
 - Briefly explain what the MPA is intended to accomplish.
 - Highlight key siting considerations such as proximity to an educational or research institution, or having marine natural heritage value.
- Ensure goals and objectives are appropriate for MPA design as follows:
 - Identify desired goals and objectives that reflect the site-specific rationale.
 - Select appropriate goals based on the rationale for MPA placement and design of the MPA, using the evaluation criteria provided in this evaluation.
 - Once appropriate goals have been identified, move to identify specific objectives under those goals that also reflect the site-specific rationale and overall design and intent of the MPA.
 - Ensure that MPAs with an LOP below moderate-high have appropriate and attainable goals and clearly defined rationale to justify intent of the MPA as it relates to the MLPA.

PART III. Prospects to Meet the Goals of the MLPA

The MLPA specifically calls for improving the existing array of MPAs in California, and to establish a network of MPAs that, when taken together, meet all of the goals of the MLPA. The Department will provide comments to the Blue Ribbon Task Force and the Commission regarding existing MPAs that do not help meet the goals or requirements of the MLPA. The Department will also highlight proposed MPAs that would create a management burden, including those that propose complex regulations, provide little protection ecologically due to extensive allowed take, do not meet science guidelines, or do not work to meet any of the goals of the MLPA. For example, as it pertains to proposed inshore ribbons, the MLPA Science Advisory Team has highlighted that nearshore ribbons allowing liberal inshore harvest may limit ecological benefit and functioning of the offshore component of the MPA cluster. In these cases, where the MPA cluster may not function to adequately meet the goals of the MLPA, the Department will highlight that these MPAs do not meet Department or science guidelines and are unlikely to contribute to meeting the goals of the MLPA unless they are modified to increase the LOP. Alternately, the Department recommends that the NCRSG identify areas that encompass both alongshore protection coupled with offshore protection. See the Commission's recent action at Stewart's Point SMR in the north central coast for an example of how this can be accomplished.